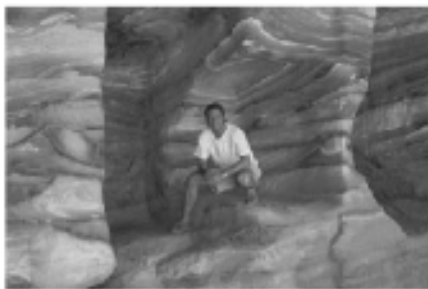


Journeys, an Electronic Field Trip

Journeys to Wilderness Canyons examines how rivers, other natural phenomena, and human activity affect landscapes and plant and animal habitats. Through the four-part series, more than a million middle school students in the United States and other countries explored the unique ecosystem in the Black Canyon of the Gunnison National Park in Colorado; they compared the canyon's environment with Petra, Jordan; Valles Marineris, Mars; and Three Gorges, China. The electronic field trips aired each Wednesday in March 2001, 1:00-1:30 p.m. (ET), and were delivered free to schools with satellite capability and/or Internet access. Registration information was available at www.oneplaneteducation.com/canyons/, and students and teachers accessed the interactive/exploratory Web site for series support materials.



Journeys, which is designed to meet national science standards, was presented by the Satellite Educational Resources Consortium (SERC) in partnership with the U.S. Department of Education, the National Park Service, One Planet Education Network (OPEN), The Weather Channel, and KLVX-Clark County School District/Las Vegas. Dan Garrison of KLVX, which produced the series, considers the Black Canyon "an amazing place," and to study the canyon, the film crew, National Park Service interpreters, and students from Gunnison area schools flew over it, hiked down it, explored its waters, and rappelled its sheer walls. "We're fortunate to have this canyon protected by the National Park Service and to have the opportunity to capture it on videotape to share with teachers and students around the world," he said.



George Newman, president of OPEN, thinks that *Journeys* is a significant addition to the science-based Star Schools project. "With satellite and/or Internet access, teachers and students throughout the world were able to use this instructional resource," he said.

To Wyndeth Davis of the National Park Service, the series is a way to allow thousands of students who may never visit Black Canyon to experience its beauty and "appreciate the Gunnison National Park's incredible natural resources and the area's place in geological time."

The Weather Channel's Carolyn Jones is pleased that *Journeys* viewers learn "how weather helped to create the canyon and is constantly changing its rock formations."

"Our goal is to use distance education technology to provide quality learning opportunities. Electronic field trips, such as *Journeys to Wilderness Canyons*, enable teachers to broaden the horizons within their classrooms," said Dr. Shirley Ann Smith, director of curriculum and Star Schools project director for SERC. Star Schools is funded by the US Department of Education.

SERC is a nonprofit consortium that combines the assets of state and local departments of education with public broadcasting to design, produce, and deliver educational resources. Virtual excursions offered previously by SERC include the award-winning *Journeys to Alaska* (1999) and *The Power of Volcanoes* (2000). Students in 45 states and 15 countries around the world participated in the *Volcanoes* excursion. "With the addition this year of Spanish versions of the electronic field trip and the Web site, we are broadening our scope and appealing to an even more diverse audience than in previous years," said Star Schools Project Manager Phil Hayes.

The Barrett Experience with *Journeys*

During March and April, fourth graders at Barrett Elementary School in Arlington, Virginia took electronic field trips to canyons in Colorado, Jordan (Petra) and Mars (Valles Marineris). The students learned about the forces of nature that form canyons. They saw examples of the interdependence of plants and animals living in the Black Canyon of Colorado and studied the adaptations that plants and animals have had to make to live in the canyon.

The program, *Journeys to Wilderness Canyons*, was broadcast each Wednesday in March. Highlights for Barrett students included communicating via email with an archeologist, Dr. Leigh-Ann Bedal in Petra, Jordan, and a visit to their school by Mike Johnson, the Black Canyon park ranger featured in the broadcasts.



For one of the broadcasts, Barrett was selected to host visitors from the U.S. Department of Education, the Office of the Interior, and the Executive Office of the President. SERC provided t-shirts for the students and teachers. The 70 fourth grade students watched the broadcast in the library and took notes on animal adaptations. They then rotated through "centers," visiting canyons via the Internet in the Computer Lab, experimenting with bird beak adaptations in the Discovery Lab, and dissecting owl pellets (to determine what the owls of Potomac Overlook Park eat) in the library.

Barrett's electronic field trips experience will be included in a national TV program to air in June. For more information, visit the Barrett Web site at <http://www.arlington.k12.va.us/schools/barrett/>

Students' Comments:

On the computer, my partner and I looked at cool places that have canyons. It was awesome. The bird beak and owl pellet activities were fun.



The whole entire United States could fit in the canyon we saw on Mars. I really liked drawing things we saw, a big horned sheep in the Black Canyon in Colorado and an old building in the canyon in Petra, Jordan.

We met Ranger Mike Johnson, a park ranger in the Black Canyon. A park ranger has to know all about the canyon and the animals and plants that live there. It was cool to meet a park ranger from Colorado.

Our field trip to the Black Canyon was an adventure, and I learned that I would like to be a wildlife ranger one day. I also liked pretending to be a bird in the beak activity and working like a real

scientist with the owl pellet.

Journeys' Trip to Barrett

Barrett's Project Discovery Teacher, Laurie Sullivan, "discovered" *Journeys* and used the team approach to bring it to her school. (Project Discovery is a "hands-on/minds-on" activity centered learning program to promote an in-depth

understanding of mathematics and science through the use of technology and expository writing.) “When I received an oversized postcard promoting *Journeys*, I had never used a virtual field trip. The postcard intrigued me; it provided basic information and a URL. I immediately logged on, got a password, and started planning,” said Sullivan.

The postcard included the following copy:

An electronic field trip designed for middle school students
Available live and archived via Web cast, satellite, and videocassette

Come take a trip with us . . . a virtual trip . . . and experience an exciting new use of technology as we explore *Journeys to Wilderness Canyons*. Join middle school students from around the globe as we take this virtual field trip via satellite downlink and simulcast on the Internet to Black Canyon of the Gunnison National Park (Colorado) and other canyons throughout the world.

Journeys to Wilderness Canyons is a four-part learning experience designed to meet national science standards. Through inquiring and problem solving activities, students follow a journey through time to discover how these canyons have become such a powerful illustration of natural forces and human impact. The series will address: What is a wilderness canyon? How have forces of nature shaped wilderness canyons? What plants and animals live at Black Canyon? What are the human influences on wilderness canyons?

Sullivan’s first contact was Cynthia Long, Barrett’s lead science teacher. Their combined enthusiasm quickly brought the other fourth grade teachers on board. “We presented the idea to Elizabeth Burgos, Spencer Reisinger, and Amy Sack, and they agreed to work with us as a team. We also had continuous support from the instructional technology, library, reading, speech, and media staff,” said Sullivan.


She was motivated to use the program because it tied so clearly to the fourth grade science curriculum outlined in the Virginia Standards of Learning (SOL). *Journeys’* target audience was middle school, so she knew that there would have to be some modifications, some extra effort to make it work for the fourth graders. Another challenge was that approximately 80% of Barrett students speak a first language other than English. “Video is a great way to teach all students, but the canyons video really impressed us as we watched it ‘draw in’ the students who are at varying stages of learning to speak English,” said Sullivan. In fact, the high level of vocabulary challenged the native English speakers, but the classroom teachers worked with the HILT (High Intensity Language Training) teachers and Special Ed teachers to solve the problems.



“We did not plan to watch the broadcast live. We have early release on Wednesdays, and we wanted to preview the program first and work with the suggested activities and background information sources provided by the Web site,” said Sullivan. This proved to be crucial to success because it enabled the teachers to prepare the students for the challenging materials in advance.


They made recording sheets (focus aides) to keep the students “on track.” By pausing the tape many times, there was adequate time for the students to process the information that had been presented. There were also pauses for discussion and to let the students make predictions and draw pictures to better understand some of the complex elements in the video. “All students were motivated by the interaction. We loved communicating several times via email with Lee

13. Multimedia – “The Olympic Wilderness” Olympic National Park (www.nps.gov/olym/wic/wilderness.htm)



Olympic National Park
Washington

National Park Service
U.S. Department of the Interior



The Olympic Wilderness

[Olympic National Park Home](#) | [Olympic Wilderness Home](#) | [Wilderness.net](#) | [Wilderness Programs](#)

[Planning Your Trip](#)

[What is Wilderness?](#)

[Wilderness Protection](#)


[Photo Gallery](#)

What is Wilderness?
The Wilderness Act of 1964 secures "for the American people of present and future generations the benefits of an enduring resource of wilderness." The Act provides for the designation of wilderness areas, defines what wilderness is and provides direction for wilderness area management.

The Act defines wilderness as: "a tract of undeveloped federal land of primeval character and without permanent improvements or human habitation; an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain; where the forces of nature predominate and the imprint of human activities is substantially unnoticeable; which provides outstanding opportunities for solitude and unconfined and primitive type of recreation. [Click here for the full text of the Wilderness Act.](#)

It directs such areas to be managed: for use and enjoyment in ways that leave them unimpaired as wilderness; for the protection and preservation of their wilderness values; and for acquiring information to facilitate preservation and public use of wilderness.

In 1988, Congress designated 95% of Olympic National Park's 922,650 acres as Wilderness.


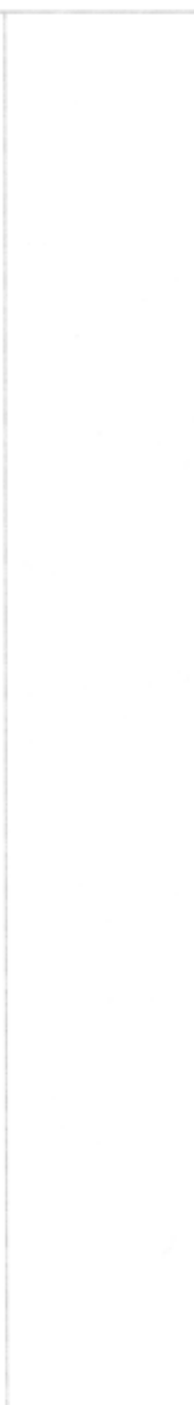


See Below

[The Value of Wilderness](#)

[Quotes](#)

13. Multimedia – “The Olympic Wilderness” Olympic National Park (www.nps.gov/olym/wic/wilderness.htm)

	<p>Dark green shaded area = designated wilderness Orange shaded area = non-wilderness</p> <p>Historically, wilderness was called a “wasteland” and a place where only vicious wild animals lurked. The lack of knowledge about these wild areas fostered fear. People were frightened of wild, untamed areas. Some still are. But spending some time in the wilderness, usually reveals that this is not a place to fear but a place of wonder, beauty and enjoyment that should be respected and protected.</p> <p>What is the Value of Wilderness? Wilderness provides...</p> <ul style="list-style-type: none"> •...the highest level of protection for some of the most pristine and least manipulated wildlands in the United States. •... critical habitat for rare and endangered species of plants and animals as well as protection of other vital components of healthy and diverse ecosystems such as air quality and watersheds. •...a sense of wildness, which can be valuable to people whether or not they actually visit wilderness. Just knowing that wilderness exists can produce a sense of curiosity, inspiration, renewal, imagination, hope and potential. •...extraordinary and challenging recreational opportunities, allowing present and future generations the opportunity to experience risk, reward, and self-reliance. •...the opportunity to explore societal and personal values as they relate to the use and appreciation of wildlands where humans are temporary visitors, not permanent residents. •...a unique venue for scientific activities that address natural systems and processes. •...a learning laboratory for teaching conservation, preservation, ecosystem management, and resource stewardship. <p>Why is the Olympic Wilderness Special? The Olympic Wilderness is home to many species of plants and wildlife. Several of these are found nowhere else in the world. In the Olympic forests stand some of the world’s largest trees, some towering over 300 feet above the forest floor. Olympic is home to most of the remaining herds of Roosevelt elk for which Olympic National Park was established. Olympic is one of the wildest places remaining in the contiguous United States.</p> <p>Wonder, discovery, understanding, amazement, inspiration, solitude, renewal, challenge and much more await you in the Olympic Wilderness. There are many reasons the Olympic Wilderness is special and worthy of our care and protection. Some may only need pictures or descriptions to realize its importance to the survival and sustenance of human kind. If you have the opportunity to travel into the Olympic Wilderness, think about why it is special to you and how it might be special to others and do your best to leave Olympic in such a way that it will remain wild and unimpaired into the future.</p> <p>Healthy Ecology at Work Defenders of wilderness note that humans need wildlands as examples of unhindered, healthy ecological processes. Humans have altered the landscape so drastically that wilderness provides a necessary yardstick with which to measure the damage. For instance, intact wilderness plant and animal communities can help us measure the accelerating loss of biodiversity through species extinction.</p>	

13. Multimedia – “The Olympic Wilderness” Olympic National Park (www.nps.gov/olym/wic/wilderness.htm)

While wilderness helps us gauge our destructiveness, it also works to mitigate the damage. Wild areas filter air and water, break down waste, recycle nutrients, and generate soil. Forests all over the world are carbon dioxide sinks, helping to balance man's increasing release of greenhouse gases in to the atmosphere, possibly moderating extreme weather and climatic fluctuations.

Wilderness as a Symbol

Aldo Leopold said "Wilderness ... is the raw material of human culture and gives definition and meaning to the human enterprise. It provides the single starting-point, to which man returns again and again to organize yet another search for a durable scale of values." For Americans there is a clear relationship between wilderness and freedom. The wild frontier symbolized freedom from the restraints and confines of civilization. The act of preserving wilderness indicates a conscious decision to value the resources it harbors or do without others it might contain. "Going without" can be an enriching experience.

Wildness Within

Wilderness is also a medium through which people can reconnect to the wildness within the human soul. For millennia our species lived much more closely to the land than we do now. Consequently, Sigmund Freud contends, humans find civilization oppressive and stressful.

When you visit the wilderness, think about what wilderness is to you? What could you do to help preserve Olympic's wilderness for future generations? In your camp and when traveling through wilderness, think about your actions and their impact on wildlife, plant life, other wilderness travelers and future generations of wilderness travelers. Over 50,000 people a year visit Olympic National Park's backcountry wilderness. If we limit our impacts, we can preserve the beauty and wildness of wilderness and prevent the debilitation of our experience and the experiences of others.

Please learn more about what you can do to **Leave No Trace** in Olympic's wilderness.

Wilderness Quotes

Theodore Roosevelt

"There are no words that can tell of the hidden spirit of the wilderness..."

Rachel Carson

"Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts. There is symbolic as well as actual beauty in the migration of the birds, the ebb and flow of the tides, the folded bud ready for the spring. There is something infinitely healing in the repeated refrains of nature - the assurance that dawn comes after night, and spring after the winter. The lasting pleasures of contact with the natural world are not reserved for scientist but are available to anyone who will place himself under the influence of earth, sea, and sky, and their amazing life."

Annie Dillard

"Trees have a curious relationship to the subject of the present moment. There are many created things in the universe that outlive us, that outlive the sun, even, but I can't think about them. I live with trees. There are creatures under our feet, creatures that live over our heads, but trees live quite convincingly in the same filament of air we inhabit, and, in addition, they extend impressively in both directions, up and down, shearing rock and fanning air, doing their real business just out of reach. A blind man's idea of hugeness is a tree. They have their sturdy bodies and special skills; they garner fresh water; they abide."